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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,800	08/15/2001	Gordon James Yorke	OR02-13201	3560

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EXAMINER

LEROUX, ETIENNE PIERRE

ART UNIT	PAPER NUMBER
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2171

DATE MAILED: 08/25/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/930,800

Applicant(s)

YORKE, GORDON JAMES

Examiner

Etienne P LeRoux

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) 19-50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: ____.

Election/Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Restriction: 1st Grouping

- I. Claim 49, drawn to:

Electronic signals in a computer, classified in class 363, subclass 19.

Restriction: 2nd Grouping

- II. Claim 50, drawn to:

A computer program, classified in class 709, subclass 310.

Restriction: 3rd Grouping

- III (a) Claims 19-31, drawn to:

A Method of creating proxy objects, classified in class 345, subclass 762.

- III (b) Claims 32-33, drawn to:

A Method of maintaining bi-directional relationship integrity, classified in class 710, subclass 1.

- III (c) Claims 44-47, drawn to:

A Proxy object for setting a new reference including peer value determiner, classified in class 707, subclass 103R.

Restriction: 4th Grouping

- IV (a) Claims 1-18, drawn to:

A Method for setting a new reference value, classified in class 707, subclass 206.

- IV (b) Claims 34-43, drawn to:

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A Bi-directional relationship manager for setting a new reference value, classified in class 725, subclass 105.

2. Inventions I and II / III / IV are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because electronic signals in a computer can be related to a hardware or software. The subcombination has separate utility such as in the generation of object-oriented programming code.

3. This application contains claims directed to the following patentably distinct species of the claimed invention:

II A computer program

III (a) A method of creating proxy objects

III (b) A method of maintaining bi-directional relationship integrity

III (c) A proxy object

IV (a) A method for setting a new reference value

IV (b) A bi-directional relationship manager

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Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

5. A telephone call was made to Mr. A Richard Park on August 15, 2003, to request an oral election to the above restriction requirement. Claims 1-18 were elected, without traverse for the first office action.

6. Claims 19-50 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in telephone call with Mr. A Richard Park on August 15, 2003.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites "wherein the proxy object creating step creates proxy objects at uni-directional peer relationships that comprise bi-directional relationships." It is unclear how a uni-

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directional relationship comprises a bi-directional relationship. Furthermore, claim 7, recites similar language.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 3-5, 10-12 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat No 5,732,270 issued to Foody et al (hereafter Foody '270) in view of Pub No US 2003/0110024 issued to Broussard (hereafter Broussard '024).

Claims 1, 15, 16, 17, 18:

Foody '270 discloses:

- receiving bi-directional [col 6, lines 49-50] relationship information indicating interrelation between objects [col 6, line 47] having one or more bi-directional relationships;
- creating proxy objects [Fig 1, 100 and col 6, lines 60-63] based on the bi-directional relationship information for selected bi-directional relationship objects having bi-directional relationships;
- receiving a new reference value [manipulating proxy object, col 8, line 57] to be set in a selected object relating to a bi-directional relationship;

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Foody '270 does not disclose determining, using one or more of the proxy objects, a new peer value to be set for a peer object which has the bi-directional relationship with the selected object and setting the new peer value to a proxy object related for the peer object.

Broussard '024 discloses:

- determining, using one or more of the proxy objects, a new peer value [Fig 1a, 20] to be set for a peer object which has the bi-directional relationship with the selected object;
- setting the new peer value [paragraph 0044] to a proxy object created for the peer object.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Foody '270 to include determining, using one or more of the proxy objects, a new peer value to be set for a peer object which has the b-directional relationship with the selected object and setting the new peer value to a proxy object related for the peer object as taught by Broussard '024.

The ordinarily skilled artisan would have been motivated to modify Foody '270 for the purpose of standardizing methods called members of the Java component peer class across platforms to eliminate platform dependence and thus provide rapid development of software programs of modern object oriented programming language so that they can be run without modification on any computer or under any operating system that supports a Java virtual machine.

Claim 3:

Foody '270 discloses wherein the bi-directional relationship information receiving step receives the reference value information from a data storage in which data corresponding to the objects is stored [Fig 1]

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Claim 4:

Foody '270 discloses wherein the bi-directional relationship information receiving step receives the reference value information from a new object that is newly created by a user [col 1, lines 48-55].

Claim 5:

Foody '270 discloses the essential elements of the claimed invention as noted above.

Foody '270 does not disclose wherein the bi-directional relationship information receiving step receives the reference value information that includes a collection of reference values for a bi-directional relationship object which references many peer objects.

Broussard '024 discloses wherein the bi-directional relationship information receiving step receives the reference value information that includes a collection of reference values for a bi-directional relationship object which references many peer objects [paragraph 0024]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Foody '024 to include wherein the bi-directional relationship information receiving step receives the reference value information that includes a collection of reference values for a bi-directional relationship object which references many peer objects as taught by Broussard '024.

The ordinarily skilled artisan would have been motivated to modify Foody '024 for the purpose of making a library of operating services available to quickly and accurately generate object oriented code [paragraph 0021].

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Claims 10-12:

Foody '270 discloses the essential elements of the claimed invention as noted above in claim 1.

Foody '270 does not disclose wherein the new peer value determining step comprises a step of passing the new reference value through related proxy objects that are related to the bi-directional relationship.

Broussard '024 discloses wherein the new peer value determining step comprises a step of passing the new reference value through related proxy objects that are related to the bi-directional relationship [paragraph 0044]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Foody '270 to include determining, using one or more of the proxy objects, a new peer value to be set for a peer object which has the b-directional relationship with the selected object and setting the new peer value to a proxy object related for the peer object as taught by Broussard '024.

The ordinarily skilled artisan would have been motivated to modify Foody '270 for the purpose of standardizing methods called members of the Java component peer class across platforms to eliminate platform dependence and thus provide rapid development of software programs of modern object oriented programming language so that they can be run without modification on any computer or under any operating system that supports a Java virtual machine.

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Claim 14:

The combination of Foody '270 and Broussard '024 discloses the elements of claim 1 as noted above

The combination of Foody '270 and Broussard '024 does not disclose wherein the setting step sets a new peer value by replacing an old reference value with the new peer value.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Foody '270 and Broussard '024 to include wherein the setting step sets a new peer value by replacing an old reference value with the new peer value.

The ordinarily skilled artisan would have been motivated to modify the combination of Foody '270 and Broussard '024 for the purpose of making the component peers platform independent by changing the porting across platforms [paragraph 0044].

11. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Foody '270 and Broussard '024 as applied to claim 1 above, and further in view of Pub No US 2003/0056195 issued to Hunt (hereafter Hunt '195).

Claim 2:

The combination of Foody '270 and Broussard '195 disclose the elements of claim 1 as noted above.

The combination of Foody '270 and Broussard '195 does not disclose receiving object model meta-data defining relationships between objects in the object model; and retrieving reference value information that represents reference values indicating current peer objects for the bi-directional relationships.

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Hunt '195 discloses receiving object model meta-data defining relationships between objects in the object model; and retrieving reference value information that represents reference values indicating current peer objects for the bi-directional relationships [abstract].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Foody '270 and Broussard '195 to include receiving object model meta-data defining relationships between objects in the object model; and retrieving reference value information that represents reference values indicating current peer objects for the bi-directional relationships as taught by Hunt '195.

The ordinarily skilled artisan would have been motivated to modify the combination of Foody '270 and Broussard '195 for the purpose of providing a method and apparatus for automating generation of object oriented code for an object and thus improving the speed and accuracy of code generation [paragraph 0004]

12. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Foody '270 and Broussard '024 as applied to claim 1 above, and further in view of Pub No US 2002/0152304 issued to Collazo (hereafter Collazo '304).

Claims 6-9:

The combination of Foody '270 and Broussard '024 discloses the elements of claim 1 as noted above.

The combination of Foody '270 and Broussard '024 does not disclose wherein the proxy object creating step creates proxy objects at uni-directional peer relationships that comprise bi-directional relationships.

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Collazo '304 discloses 6. The method as claimed in claim 1, wherein the proxy object creating step creates proxy objects at uni-directional peer relationships that comprise bi-directional relationships [paragraph 0030].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Foody '270 and Broussard '024 to include 6. The method as claimed in claim 1, wherein the proxy object creating step creates proxy objects at uni-directional peer relationships that comprise bi-directional relationships as taught by Collazo '304.

The ordinarily skilled artisan would have been motivated to modify the combination of Foody '270 and Broussard for the purpose of expediting data gathering and passing from node-to-node in a processing device such as a server [abstract.] .

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Foody '270 and Broussard '024 as applied to claim 1 above, and further in view of US Pat No 5,717,917 issued to Munakata (hereafter Munakata '917)

Claim 13:

The combination of Foody '270 and Broussard '195 disclose the elements of claim 1 as noted above.

The combination of Foody '270 and Broussard '195 does not disclose wherein the setting step sets a value null when the determining step determines to remove the bi-directional relationship.

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Munakata '917 discloses wherein the setting step sets a value null when the determining step determines to remove the bi-directional relationship [col 4, lines 29-40].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Foody '270 and Broussard '195 to include wherein the setting step sets a value null when the determining step determines to remove the bi-directional relationship as taught by Munakata '917.

The ordinarily skilled artisan would have been motivated to modify the combination of Foody '270 and Broussard '195 for the purpose of providing a method of controlling information on data links [abstract]

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne LeRoux whose telephone number is (703) 305-0620.

The examiner can normally be reached on Monday – Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (703) 308-1436.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Etienne LeRoux

August 18, 2003.


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